110th Congress

1st Session

SENATE

REPORT 110–224

TO DIRECT THE ADMINISTRATOR OF GENERAL SERVICES TO INSTALL A PHOTOVOLTAIC SYSTEM FOR HEADQUARTERS BUILDINGS OF THE DEPARTMENT OF ENERGY

NOVEMBER 7, 2007.—Ordered to be printed

Mrs. Boxer, from the Committee on Environment and Public Works, submitted the following

# REPORT

[To accompany H.R. 798]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred the bill (H.R. 798) to direct the Administrator of General Services to install a photovoltaic system for the headquarters building of the Department of Energy, having considered the same, reports favorably thereon without amendment, and recommends that the bill do pass.

# BACKGROUND

The photovoltaic system called for in this legislation is known as the Solar Net. It was the winning design produced by a competition sponsored by the U.S. Department of Energy (DoE), National Renewable Energy Laboratory, in cooperation with The American Institute of Architects, and the Architectural Engineering Institute. The DoE competition included submissions from 151 teams.

The competition required that a minimum of 100 kilowatts be generated by the design. The winning design will produce 460,000 kWh.

The winning design is 300 feet long and 130 feet high. It incorporates 24,750 square feet of power generating panels. This innovative design uses solar skin to create both exterior planes and interior spaces. The clean energy produced by the wall is channeled back into the building in the form of electricity, hot water, and convected heat.

The steel structure itself is a series of curved primary cable trusses spanning between the vertical concrete wall and the reconfigured ground plane. Steel brackets will serve as mastheads for the trusses.

The sun wall will be the largest solar installation in a Federal building.

#### SUMMARY OF THE LEGISLATION

H.R. 798 directs the Administrator of General Services to install a photovoltaic system for the headquarters building of the Department of Energy, as set forth in the Sun Wall Design Project. The Department of Energy Building is located at 1000 Independence Avenue, Southwest, Washington D.C., which is commonly known as the Forrestal Building. Funding for the photovoltaic system would be authorized from the Federal Buildings Fund.

#### CONGRESSIONALLY DIRECTED SPENDING

For purposes of rule XLIV of the Standing Rules of the Senate, H.R. 798 does not contain any congressionally directed spending.

### HEARINGS

There have been no hearings on H.R. 798 by the Committee.

## ROLLCALL VOTES

There were no rollcall votes during the consideration of H.R. 798 by the Committee.

### MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104–4), the committee finds that this bill would impose no Federal intergovernmental unfunded mandates on State, local or tribal governments. All of its governmental directives are imposed on Federal agencies. The bill does not directly impose any private sector mandates.

## EVALUATION OF REGULATORY IMPACT

Section 11(b) of rule XXVI of the Standing Rules of the Senate requires publication in the report the committee's estimate of the regulatory impact made by the bill as reported. No regulatory impact is expected by the passage of the bill. The bill will not affect the personal privacy of individuals.

## COST OF LEGISLATION

The Congressional Budget Office estimates that implementing this project would cost \$6 million in 2008 and \$30 million over the 2008–2012 period. The Congressional Budget office also estimates that this project would not affect net Federal outlays over the 2008–2012 period because spending on this project would be offset by decreased spending later in that period. The estimate of the Congressional Budget Office is attached.

H.R. 798—An act to direct the Administrator of General Services to install a photovoltaic system for the headquarters building of the Department of Energy

H.R. 798 would require the General Services Administration to install a solar energy (photovoltaic) system on the side of the head-

quarters building of the Department of Energy (DOE) located in Washington, DC. Photovoltaic systems use solar-power technology to convert energy from the sun into electricity. The project would consist of a "sun wall" of almost 25,000 solar panels that would provide some electricity and hot water to the building. The legislation would direct the use of \$30 million in unobligated balances in the Federal Buildings Fund beginning in fiscal year 2008 to install the system.

Currently, the Federal Buildings Fund has unobligated balances of over \$2 billion available for construction, repair, and alteration of federal buildings. Legislation that modifies the expected spending pattern of those balances would be considered a change in direct spending but would not increase budget authority. Based on information from DOE, CBO estimates that implementing this project would cost \$6 million in 2008 and \$30 million over the 2008–2012 period. However, we also estimate that this project would not affect net federal outlays over the 2008–2012 period because spending on this project would be offset by decreased spending later in that period.

H.R. 798 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would

not affect the budgets of state, local, or tribal governments.

On February 12, 2007, CBO transmitted a cost estimate for H.R. 798 as ordered reported by the House Committee on Transportation and Infrastructure on February 7, 2007. The versions of the legislation are identical, as are the CBO cost estimates.

The CBO staff contact for this estimate is Matthew Pickford. The estimate was approved by Peter H. Fontaine, Deputy Assistant Di-

rector for Budget Analysis.

## CHANGES IN EXISTING LAW

Section 12 of rule XXVI of the Standing Rules of the Senate requires the committee to publish changes in existing law made by the bill as reported. Passage of this bill will make no changes to existing law.

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